

REMARKS

This is a full and timely response to the outstanding final Office Action mailed on August 6, 2008 (Paper No. 20070804). Upon entry of this response, claims 2-14, 18, 20-22, and 24-72 are pending in the application. Claims 14, 18, 20-22, 24-25, 28, 31-36, 50-51, and 53-72 are allowed. In this response, claim 47 has been amended. Applicants respectfully request that the amendments being filed herewith be entered and request reconsideration and allowance of all pending claims.

I. Claim Objections

Claims 47 and 52 have been objected to for various informalities. Claim 47 has been objected to because "'the negotiated value' and should be 'the negotiated limiting value'" (Office Action, page 2). Claim 47 has been amended according to the Examiner's suggestion.

Claim 52 has been objected to because "'the limiting value' should be 'the value'" (Office Action, page 2). Applicants respectfully disagree. Specifically, claim 52 depends from claim 30, which provides as follows (emphasis added):

30. The receiving DSL modem of claim 14, wherein the value for the first performance parameter is a limiting value.

Thus, Applicants respectfully submit that the suggested correction is not required and that claim 52 is in condition for allowance.

Therefore, for at least the reasons described above, Applicants respectfully submit that the objections have been overcome and request that the objections be withdrawn.

II. Claim Rejections under 35 U.S.C. §103(a)

Claims 2-4, 6, 9-12, and 37-40 have been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Goldstein* (U.S. Patent No. 5,265,151, hereafter "*Goldstein*") in view of *Gultekin et al.* (U.S. Patent No. 6,215,793, hereafter "*Gultekin*"). Claim 8 has been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Goldstein* in view of *Gultekin* in

further view of *Betts et al.* (U.S. Patent No. 5,682,378, hereafter "*Betts*"). Claim 13 has been rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over *Goldstein* in view of *Gultekin* in further view of *Archibald et al.* (U.S. Patent No. 5,369,703, hereafter "*Archibald*"). Applicants respectfully traverse these rejections as applied to pending claims 2-4, 6, 8-13, and 37-40.

The U.S. Patent and Trademark Office ("USPTO") has the burden under section 103 to establish a *prima facie* case of obviousness according to the factual inquiries expressed in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). The four factual inquiries, which are also expressed in MPEP § 2141, are as follows:

- (A) Determining the scope and contents of the prior art;
- (B) Ascertaining the differences between the prior art and the claims in issue;
- (C) Resolving the level of ordinary skill in the pertinent art; and
- (D) Evaluating evidence of secondary considerations.

Applicants respectfully submit that a *prima facie* case of obviousness is not established using the art of record.

A. Independent Claim 2

Applicants' claim 2 provides as follows (emphasis added):

A method of adjusting transmit performance parameters over a digital subscriber line (DSL), the method performed in a first DSL modem, the method comprising the steps of:

negotiating, with a second DSL modem, a limiting value of a first performance parameter;

receiving, from the second DSL modem, a signal exhibiting the first performance parameter;

determining a signal-to-noise-ratio for the received signal; and

requesting, from the second DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter.

Applicants respectfully submit that independent claim 2 is allowable for at least the reason that *Goldstein* in view of *Gultekin* does not disclose, teach, or suggest at least the features recited and emphasized above in claim 2.

The Office Action acknowledges "Goldstein fails to teach or suggest a step of negotiating, with a second DSL modem and/or transmitting DSL modem, a limiting value of a first performance parameter" (Office Action, page 4).

The Office Action alleges "Gultekin ... teaches to negotiate a data rate for future transmission over a communication link (TL), a first transceiver (TRX1) proposes a limited number of data rate values to a second transceiver (TRX2). See abstract; col. 1, lines 9-14; col. 2, lines 17-31; and the description of Figure 1 from col. 5, line 30 to col. 8, line 14" (Office Action, page 4). As such, it appears that the Office Action alleges that proposing a limited number of data rate values corresponds to "negotiating, with a second DSL modem, a limiting value of a first performance parameter". Specifically, *Gultekin* teaches:

This object is realised by an initialisation protocol to be executed by a first transceiver and a second transceiver to negotiate a data rate for future data transmission over a communication link which is coupled between the first transceiver and the second transceiver, the initialisation protocol containing a first phase wherein at least the first transceiver proposes a limited amount of data rate values for the data rate; a third phase wherein it is communicated which one of the data rate values is selected for the data rate; and a fourth phase wherein it is confirmed that the selected one of the data rate values will become the data rate for future transmission, wherein before the fourth phase is executed, the first transceiver or the second transceiver announces a new data rate proposal, whereupon the first phase is re-executed.

(Col. 2, lines 17-31). However, Applicants respectfully submit that a limited number of values for a parameter (data rate) for future data transmission" is not "a limiting value" of a parameter. As such, *Goldstein* in view of *Gultekin* does not disclose or suggest "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2.

Therefore, for at least the reasons described above, the proposed combination of *Goldstein* and *Gultekin* fails to disclose, teach or suggest all of the features recited in amended claim 2. Thus, Applicants respectfully request that the rejection of claim 2 be withdrawn.

B. Dependent Claims 3-4, 6, 9-12

Since independent claim 2 is allowable, Applicants respectfully submit that claims 3-4, 6, and 9-12 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir.1988). Therefore, Applicants respectfully request that the rejection of claims 3-4, 6, and 9-12 be withdrawn.

C. Independent Claim 37

Applicants' claim 37 provides as follows (emphasis added):

A receiving digital subscriber line (DSL) modem comprising:
a demodulator in communication with a DSL;
a memory;
a central processing unit (CPU) in communication with the demodulator and the memory; and
a control program stored in the memory, ***the control program configured to:***
negotiate, with a transmitting DSL modem, a limiting value of a first performance parameter;
determine a signal-to-noise-ratio for a signal received from the transmitting DSL modem, the signal exhibiting the first performance parameter; and
request, from the transmitting DSL modem, an adjustment in a second performance parameter associated with the received signal, wherein the second performance parameter is different from the first performance parameter.

Applicants respectfully submit that independent claim 37 is allowable for at least the reason that *Goldstein* in view of *Gultekin* does not disclose, teach, or suggest at least the features recited and emphasized above in claim 37.

The Office Action acknowledges "Goldstein fails to teach or suggest a step of negotiating, with a second DSL modem and/or transmitting DSL modem, a limiting value of a first performance parameter" (Office Action, page 4).

The Office Action alleges “Gultekin ... teaches to negotiate a data rate for future transmission over a communication link (TL), a first transceiver (TRX1) proposes a limited number of data rate values to a second transceiver (TRX2). See abstract; col. 1, lines 9-14; col. 2, lines 17-31; and the description of Figure 1 from col. 5, line 30 to col. 8, line 14” (Office Action, page 4). As such, it appears that the Office Action alleges that proposing a limited number of data rate values corresponds to “negotiat[ing], with a transmitting DSL modem, a limiting value of a first performance parameter”. Specifically, *Gultekin* teaches:

This object is realised by an initialisation protocol to be executed by a first transceiver and a second transceiver to negotiate a data rate for future data transmission over a communication link which is coupled between the first transceiver and the second transceiver, the initialisation protocol containing a first phase wherein at least the first transceiver proposes a limited amount of data rate values for the data rate; a third phase wherein it is communicated which one of the data rate values is selected for the data rate; and a fourth phase wherein it is confirmed that the selected one of the data rate values will become the data rate for future transmission, wherein before the fourth phase is executed, the first transceiver or the second transceiver announces a new data rate proposal, whereupon the first phase is re-executed.

(Col. 2, lines 17-31). However, Applicants respectfully submit that a limited number of values for a parameter (data rate) for future data transmission” is not “a limiting value” of a parameter. As such, *Goldstein* in view of *Gultekin* does not disclose or suggest “the control program configured to: negotiate, with a transmitting DSL modem, a limiting value of a first performance parameter” as recited in claim 37.

Therefore, for at least the reasons described above, the proposed combination of *Goldstein* and *Gultekin* fails to disclose, teach or suggest all of the features recited in amended claim 37. Thus, Applicants respectfully request that the rejection of claim 37 be withdrawn.

D. Dependent Claims 38-40

Since independent claim 37 is allowable, Applicants respectfully submit that claims 38-40 are allowable for at least the reason that each depends from an allowable claim. *In re Fine*,

837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir.1988). Therefore, Applicants respectfully request that the rejection of claims 38-40 be withdrawn.

E. Dependent Claim 8

For the reasons discussed in section II.A above, *Goldstein* in view of *Gultekin* does not teach or suggest "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2. The addition of *Betts* does not overcome this deficiency. Rather, *Betts* discloses "a transmitting modem ... with the ability to cancel far listener echo" (col.1, lines 33-34). The Office Action alleges that "it would have been obvious to one of ordinary skill in the art that the error rate of the first performance parameter in Goldstein's receiver of the transmitting modem is transmit data rate as taught by Betts" (Office Action, page 9). Applicants respectfully disagree. Specifically, *Betts* teaches that "cancel[ing] the far listener echo ... results in an improved SNR for the receiver of the transmitting modem, thus allowing higher data rates or reduced error rates" (col. 1, lines 32-36). As such, *Betts* teaches that data rates and error rates are not the same as alleged. Thus, *Betts* does not disclose or suggest "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2.

Because independent claim 2 is allowable over *Goldstein* in view of *Betts*, Applicants respectfully submit that claim 8 is allowable for at least the reason that it depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claim 8 be withdrawn.

F. Dependent Claim 13

For the reasons discussed in section II.A above, *Goldstein* in view of *Gultekin* does not teach or suggest "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2. The addition of *Archibald* does not overcome this deficiency. While, *Archibald* discloses "Commands sent from one modem to another using a secondary

channel are sent at a rate much slower than the primary channel data rate" (col. 1, lines 15-18), *Archibald* does not teach or suggest "a limiting value of a first performance parameter", much less "negotiating, with a second DSL modem, a limiting value of a first performance parameter" as recited in claim 2.

Because independent claim 2 is allowable over *Goldstein* in view of *Archibald*, Applicants respectfully submit that claim 13 is allowable for at least the reason that it depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). Therefore, Applicants respectfully request that the rejection of claim 13 be withdrawn.

III. Allowable Subject Matter

Applicants thank the Examiner for allowance of claims 14, 18, 20-22, 24-25, 28, 31-36, 50-51, and 53-72, as noted on page 8 of the Office Action. In addition, Applicants acknowledge the Examiner's conclusions that the claims 5, 7, 26-27, 29, and 41-49 would be allowable if rewritten in independent form.

Applicants have not amended dependent claims 5, 7, 26-27, 29, and 41-49 to incorporate the limitations of their base claims in this response because, for at least the reasons described above in sections II.A and II.C, Applicants believe that independent claims 2 and 37 are allowable. Thus, Applicants respectfully submit that claims 5, 7, 26-27, 29, and 41-49 are in condition for allowance for at least the reason that each depends from an allowable claim. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir.1988).

CONCLUSION

Applicants respectfully request that all outstanding objections and rejections be withdrawn and that this application and presently pending claims 2-14, 18, 20-22, and 24-72 be allowed to issue. Any statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions. If the Examiner has any questions or comments regarding Applicants' response, the Examiner is encouraged to telephone Applicants' undersigned counsel.

Respectfully submitted,

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